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Massachusetts Electric Vehicle Incentive Program (MassEVIP) Fleets Questions & Answers

What is MassEVIP Fleets?

The Massachusetts Electric Vehicle Incentive Program (MassEVIP) Fleets is an open enrollment grant program administered by the Massachusetts Department of Environmental Protection (MassDEP) that provides incentives to eligible entities for the acquisition of electric vehicles (EVs), zero-emission electric motorcycles (ZEMs), and the installation of Level 2 dual-port charging stations.

Why do we need MassEVIP Fleets?

MassDEP launched MassEVIP on Earth Day 2013, to help meet the Commonwealth's aggressive climate and energy efficiency goals established by the Global Warming Solutions Act (GWSA) and the Green Communities Act (GCA). MassEVIP helps the transition to a clean energy economy and reduces greenhouse gas (GHG) emissions from the transportation sector, one of the major sources of GHG emissions. The MassEVIP program helps achieve several of the Baker Administration's policy goals, including:

- The Clean Energy and Climate Plan goals under the Global Warming Solutions Act reducing GHG emissions by 25% below 1990 levels by 2020 and 80% by 2050;
- Efforts to make entities more fuel efficient; and
- Improving air quality by reducing smog forming and other pollutant emissions.

By launching MassEVIP, the Commonwealth demonstrates its commitment to increase the deployment of EVs with the aim of increasing the visibility of advanced technology vehicles in communities across the Commonwealth.



What incentives and grants are available to eligible applicants under MassEVIP Fleets?

An entity may acquire EVs either through vehicle purchase or lease. In either case, eligible entities must work with vehicle dealers regarding the details on a purchase or lease. The incentives for the acquisition of plug-in hybrid electric vehicles (PHEV), battery electric vehicles (BEV), zero-emission electric motorcycles (ZEM) and Level 2 dual-port charging stations are as follows:

ELECTRIC VEHICLE & ZEM INCENTIVES*

Eligible Entity	PHEV Purchase	PHEV Lease	BEV Purchase	BEV Lease
Municipality, Public University/College, State Agencies	Up to \$5,000	Up to \$3,000	Up to \$7,500	Up to \$5,000
Eligible Entity	ZEM Purchase			
Municipality	Up to \$750			

^{*}The incentives listed are per vehicle acquired.

Under MassEVIP Fleets, the maximum number of vehicle incentives that an eligible entity is allowed to receive is <u>twenty-five</u> throughout the entirety of the MassEVIP Fleets program, for BEVs and PHEVs combined.

Under MassEVIP Fleets, the total amount of available funding for ZEMs is \$7,500, which will allow municipalities to acquire up to 10 ZEMs (incentive is \$750/ZEM).

LEVEL 2 DUAL-PORT CHARGING STATION INCENTIVES**

# of BEVs Acquired 1-2 BEVs		3-4 BEVs	5 OR MORE BEVs
Eligible Funding	Up To \$5,000	Up To \$7,500	Up to \$10,000

^{**}Level 2 dual-port charging station funding is based on the number of Battery Electric Vehicles (BEVs) acquired.

Financial assistance for Level 2 dual-port charging stations is provided under MassEVIP with the acquisition of at least one BEV. The financial assistance increases with the acquisition of a greater number of BEVs as indicated in the table above. The incentive for charging station funding includes parts and installation costs for a Level 2 charging station with two ports (can charge two vehicles at a time) with the purchase of **at least one** BEV.

What is the MassEVIP Fleets process?

The application process is quite simple. Interested entities need to complete an application form and submit it to MassDEP. This is an open solicitation and applications will be processed



on a **FIRST COME FIRST SERVED** basis until all available funding is expended. The application form and the instructions are found on MassDEP's webpage: http://www.mass.gov/eea/agencies/massdep/air/grants/massevip-municipal.html.

MassDEP will perform a review of an entity's application for completeness and eligibility. Upon a satisfactory review, MassDEP will issue a Grant Application Approval within 30 days of receipt of the application, with an End-User Agreement that defines the terms and conditions of the grant to the awarded applicant, to be signed within 15 days of receipt of the Agreement. Upon receipt of the signed End-User Agreement by MassDEP, the approved entity will have up to 180 days to complete their vehicle acquisition and charging station installation, if applicable.

If an entity wishes to acquire a vehicle and/or charging station through a vendor on state contract, MassEVIP will provide the incentive directly to the vendor on state contract upon presentation of the invoice for the EV(s), proof of vehicle(s) registration in Massachusetts, and/or invoice for the charging station(s).

If an entity wishes to acquire an EV or ZEM that is not currently on Massachusetts state-wide contract but is identified on California's list (http://energycenter.org/index.php/incentive-programs/clean-vehicle-rebate-project/cvrp-eligible-vehicles) as a PHEV, ZEV (zero emission vehicle, referred to in MassEVIP as a BEV), or zero-emission electric motorcycle (ZEM) and is available in Massachusetts, or use an EV charging station vendor that is not on the state contract, the entity must do its own competitive bid process to acquire the vehicle or charging station equipment. If the entity wishes to lease EVs, the entity must do its own competitive bid process as the state-wide contract is for purchase only. The entity *itself* must be on a contract with the Commonwealth for goods and services as part of MassDEP's Sustainable Materials Recovery program. MassEVIP will then provide the incentive directly to the entity upon presentation of the invoice or lease agreement for the EV(s), proof of vehicle(s) registration in Massachusetts, and/or invoice for the charging station(s).

What are electric vehicles?

For the purposes of this program, an EV is an automobile that can either be powered by energy stored in an on-board rechargeable battery (BEV), or a plug-in hybrid system that uses a rechargeable battery in combination with an internal combustion engine (PHEV).

What are zero-emission motorcycles (ZEMs)?

For the purposes of this program, a zero-emission electric motorcycle is a two-wheeled motorcycle powered by energy stored in an on-board rechargeable battery.

What EVs are currently available on state contract?

The list of currently available vehicles and dealerships on state contract can be found on the program's webpage: (http://www.mass.gov/eea/agencies/massdep/air/grants/massevip-



<u>municipal.html</u>) and include battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs).

How can EV owners recharge their vehicles?

EV owners can plug into a standard wall outlet (120 volt also known as a Level 1) to recharge their vehicle. The Level 1 outlet is typically used for overnight charging. For a quicker recharge, EV owners can use a Level 2 charging station that delivers 240 volts of charging power. The table below shows the common charging levels available.

Comparison of Common Charging Levels							
Charging Level	Supply Voltage	Amps	Charging Rate	Range Per Hour Of			
			(kilowatts)	Charging			
Level 1	120	Up to 16A	1.9+ kW	5-8 miles			
Level 2	208/240	Up to 80A	3.3+ kW	10-24 miles			
DC Fast Charger	208/240	100-200A	25+ kW	40-80 miles			

Source: Massachusetts Drive Clean Workplace Charging Guide, 2016

Massachusetts has more than 460 public charging points across the state at work sites, retail stores, and commuter parking garages. For up to date information on charging stations see http://www.afdc.energy.gov/locator/stations/.

What charging stations are currently eligible and available on state contract?

MassEVIP Fleets program provides funding for the acquisition and installation of a Level 2 dual-port (can charge two vehicles at once) charging station.

The list of currently available charging stations and vendors on state contract can be found on the program's webpage: (http://www.mass.gov/eea/agencies/massdep/air/grants/massevip-municipal.html).

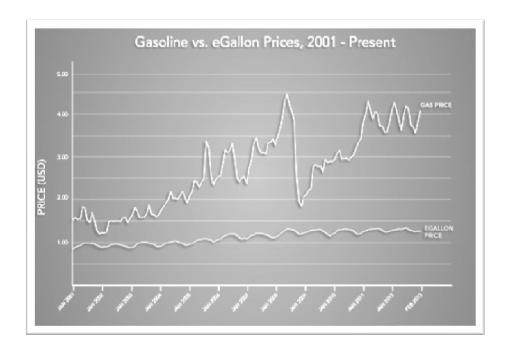
What are the benefits of electricity as a power source for a car versus a car fueled by petroleum?

Although EVs are charged with electricity generated from fossil fuels, less GHGs are emitted than a conventional gasoline fueled vehicle. The Northeast power grid is more reliant on natural gas and renewable energy, so electricity generated in the Northeast is among the cleanest in the country. EVs not only decrease GHG emissions from the tailpipe but also significantly reduce smog forming emissions.

In addition, because little of the electricity that EVs need is generated by oil, we can decrease our dependence on foreign oil imports. As indicated in the chart below, electricity costs are lower than petroleum and have historically been less volatile, so EV owners can benefit from a



reliable and less expensive source of energy to power their vehicles. Over the lifetime of an EV, an owner can save thousands of dollars in fuel cost.



Source: U.S. Department of Energy, June 10, 2013. http://energy.gov/articles/egallon-how-much-cheaper-it-drive-electricity

What are the cost savings from driving an EV?

Driving an EV costs much less per "gallon" than a conventional vehicle. The "eGallon" introduced by the US Department of Energy represents the cost of driving an EV the same distance a gasoline powered vehicle could travel on one gallon of gasoline. The eGallon is calculated using the information for electricity rates, the fuel economy of passenger cars and the average fuel consumption of EVs. The average cost of electricity in Massachusetts for November 2016 was just over 16.0 cents per kWh¹ which would translate to \$1.70 per electric gallon equivalent compared to January 2017 price of \$2.29 per gallon of gasoline.²

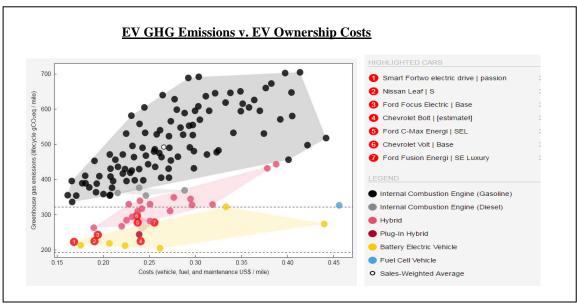
Driving an EV costs much less in overall lifetime costs of ownership. As indicated in the chart below, not only are GHG emissions lower but the overall cost for vehicle, fuel and maintenance, per mile is much lower for EVs in comparison to gasoline powered vehicles.

¹ U.S. Energy Information Administration. November, 2016. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State, November 2016 and 2015 (Cents per Kilowatthour) (http://www.eia.gov/electricity/data.cfm#summary).

² U.S. Department of Energy. E-Gallon methodology (https://energy.gov/articles/egallon-how-much-cheaper-it-drive-electricity) using Massachusetts specific information for electricity rates and fuel costs (https://www.eia.gov/dnav/pet/pet_pri_gnd_dcus_sma_w.htm).



And to compare fuel savings between specific models of conventional vehicles and EVs, go to http://www.afdc.energy.gov/calc/ for the vehicle cost calculator.



Source: CARBONCOUNTER.COM

Are EVs slower than a conventional car?

No, an EV performs similarly to a conventional gasoline-fueled vehicle.

What other resources are out there for entities to learn more about EVs?

The Massachusetts Department of Energy Resources (DOER) Clean Cities Coalition and Alternative Transportation Program is part of a nationwide program sponsored by the U.S. Department of Energy (DOE) that focuses on promoting the adoption of alternative fuel vehicles, as well as supporting the development of infrastructure necessary to make alternatively fueled vehicles (AFVs) a viable transportation option:

http://www.mass.gov/eea/energy-utilities-clean-tech/alternative-transportation/clean-cities-coalition.html

The Transportation and Climate Initiative's Northeast Electric Vehicle Network has developed a number of useful EV guidance documents for communities in the Northeast and Mid-Atlantic states. The documents were developed to help municipalities become "EV-ready": http://www.transportationandclimate.org/content/northeast-electric-vehicle-network

The U.S. Department of Energy's Clean Cities program helps vehicle fleets and consumers reduce their petroleum use. Clean Cities builds partnerships with local and statewide organizations in the public and private sectors to adopt alternative and renewable fuels, idle reduction measures, fuel economy improvements, and new transportation technologies, as they emerge: https://cleancities.energy.gov/